

**REMARKS/ARGUMENTS:**

Independent claims 1 and 12 have been amended and claims 20-22 withdrawn as will be described below.

**CLAIM REJECTIONS 35 U.S.C. §102**

Claims 1 and 12 generally require a volatile memory that may be set to a low power consumption mode by means of a data bit held in memory. Specifically, the claims require: memory “providing a low power operating mode controlled by volatile data held in the volatile memory”. As noted in the present application at paragraph 9, momentary power interruption, for example, when back-up batteries are replaced, can cause memories of this type to revert to a high power consumption mode, which quickly exhausts the power of the newly installed batteries. The present invention addresses this problem related to “dual power mode” memories of this type.

Applicant is unable to find any teaching or suggestion in Caulkins for a “dual power mode” memory as required by claims 1 and 12. Caulkins appears to teach a standard volatile memory having a single power mode.

Caulkins also fails to teach holding the battery disconnected (after loss and restoration of battery voltage) per the amendment of claims 1 and 12. Caulkins is silent as to what would happen if the low battery were to be replaced but indicates that when line power is returned, access to the memory is regained. See generally, col. 10, lines 13 through 31.

The deficiencies in Caulkins are not remedied by Lee. Lee describes a problem related to memory modules, for example, like those used in digital cameras, in which a backup battery is combined with a volatile solid-state memory. When this memory module is in inventory, before being sold to a consumer, Lee teaches disconnecting the battery from the memory by an isolation signal. Once the memory module is put into use, a signal is used to reconnect the battery, thus significantly prolonging the shelf life of the memory module.

Col. 11, line 40 of Lee, cited by the Examiner, describes connecting the battery to the memory for the first time, not a reconnecting of power after battery

voltage has dropped and then been restored. When the line power is stably restored, the intent of Lee is that the backup battery be reconnected to the solid-state memory unconditionally.

Thus, Lee fails to teach a dual power mode memory and a latching signal that prevents automatic reconnection of the battery to the volatile memory after restoration of battery power.

Fundamentally, the references fail to teach the problem or a solution to the problem of dual power mode memories rapidly draining power when they lose their power state data during momentary loss of backup voltage. These references teach away from the present invention by describing single power consumption mode devices where disconnection of the battery and holding the battery disconnected would not be useful.

In light of these amendments and remarks, it is believed that claims 1 and 12 and all claims dependent on these claims are in condition for allowance and allowance is respectfully.

Respectfully submitted,

WILLIAM EDWARD FLORO *et al.*

By:

Keith M. Baxter  
Reg. No. 31,233  
Attorney for Applicant  
Quarles & Brady LLP  
411 E. Wisconsin Avenue  
Milwaukee WI 53202-4497  
(414) 277-5719